

BEST AVAILABLE COPYRECEIVED
CENTRAL FAX CENTER

10/771,723

AUG 17 2006

- 1-33. (CANCELED)
34. (PREVIOUS PRESENTED) A dual-clutch transmission (1, 30) having at least six gears, the dual-clutch transmission comprising:

first and second clutches (K1, K2) each having an input side connected with a drive shaft (2) of a prime mover and an output side thereof connected with one of a hollow input shaft (3) and a solid input shaft (4) disposed coaxially to each other;

first and second countershafts (5, 6) upon which are rotatably supported idler wheels (7, 8, 9, 10, 15, 16, 17, 34, 35, 36);

fixed gear wheels (11, 12, 13, 14, 33, 37) non-rotatably situated upon said hollow and solid input shafts (3, 4) which are in meshing contact with said idler wheels (7, 8, 9, 10, 15, 16, 17, 34, 35, 36);

coupling devices (22, 23, 24, 25, 31, 32) non-rotatably and axially movably supported upon said first and second countershafts (5, 6) and movable by setting devices, and output gear wheels (18, 19), which are in meshing contact with an output toothed (20) on a differential transmission (21), are respectively fastened on said first and second countershafts (5, 6);

wherein first and second fixed wheels (13, 14) are situated upon the hollow input shaft (3) and at least one other fixed wheel (respectively 12 or 37) is situated upon the solid input shaft (4) for respectively driving at least two idler wheels (8, 15 and 35, 36; 9, 16; 10, 17); and the gear wheels of the transmission are sequentially disposed therein, beginning from said first and second clutches (K1, K2), as follows: a reverse gear (RG) and a second gear (G2), a fourth gear (G4) and a sixth gear (G6), a third gear (G3) and a fifth gear (G5), and a first gear (G1).

35. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein the first and second fixed wheels (13, 14) are fastened on said hollow input shaft (3) while the at least one other fixed wheel (12) is supported by said solid input shaft (4).

36. (CANCELED)

37. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein an idler wheel (16 or 36) of a highest gear (G6 or G7) and an idler wheel (15 or 16) of a second highest gear (G5 or G6) are situated upon said second

BEST AVAILABLE COPY

10/771,723

countershaft (6) while an idler gear (9 or 35) of a third highest gear (G4 or G5) and an idler wheel (8 or 9) of a fourth highest gear (G3 or G4) are situated on said first countershaft (5).

38-40. (CANCELED)

41. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein said first and second countershafts (5, 6) are disposed one of paraxially and forming an angle with said hollow and solid input shafts (3, 4).

42. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein distances of both said first and second countershafts (5, 6) from the solid input shaft (4) and from the hollow input shaft (3) are different and said output gear wheels (18, 19) upon said first and second countershafts (5, 6) form, with the output toothings (20) upon a differential transmission (21), reduction ratios of different magnitudes.

43. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34 , wherein said output gear wheels (18, 19) are situated on ends of said first and second countershafts (5, 6) adjacent said first and second clutches (K1, K2).

44. (CANCELED)

45. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein one of linear gears or non-linear gears are driven by the hollow input shaft (3).

46. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein a fourth gear (G4) and a reverse gear (RG) device (23) are alternatively non-rotatably connectable with said first countershaft (5) via a common coupling , and a second gear (G2) and a sixth gear (G6) are alternatively non-rotatably connectable via [[with]] another common coupling device (25) with said second countershaft (6).

47. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein a first gear (G1) and a third gear (G3) are alternatively non-rotatably connectable with said first countershaft (5) via a common coupling device (22), and a fifth gear (G5) is non-rotatably connectable with said second countershaft (6) via another coupling device (24).

BEST AVAILABLE COPY

10/771,723

48. (WITHDRAWN - PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein a first gear (G1) and a fifth gear (G5) are alternatively non-rotatably connectable with said first countershaft (5), and a third gear (G3) and a seventh gear (G7) are alternatively non-rotatably connectable via [[with]] another common coupling device (32) with said second countershaft (6).

49. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein the coupling devices (22, 23, 24, 25, 31, 32) are one of positive fit dog clutches and shifting sets.

50. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 49, wherein each one of said coupling devices (22, 23, 24, 25, 31, 32) comprise a sliding sleeve axially movable upon the respective first and second countershafts (5, 6) but non-rotatably connected therewith and synchronizer rings disposed on opposite sides thereof.

51. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein idler gear wheels (7, 17, 10) of a first gear (G1), of a second gear (G2) and of a reverse gear (RG) are situated in areas adjacent sides of a housing of the transmission.

52. (PREVIOUSLY PRESENTED) The dual-clutch transmission according to claim 34, wherein gear wheels (7, 17, 10) of a first gear (G1), of a second gear (G2) and a reverse gear (RG) are located in a central area of the transmission.

53. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein the first clutch (K1) is situated closer to the prime mover and is provided as a starting clutch for a first gear (G1).

54. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein the second clutch (K2) is situated further from the prime mover and is provided as a starting clutch for a reverse gear (RG).

55. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein the first and second clutches (K1, K2) are one of powershift clutches, multi-disc clutches and dry one-disc clutches.

BEST AVAILABLE COPY

10/771,723

56. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein said first and second clutches (K1, K2) are situated one of paraxially and coaxially with each other.

57. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein a separate starting element is situated between said drive shaft (2) of the prime mover and the input side of said first and second clutches (K1, K2).

58. (WITHDRAWN - PREVIOUS PRESENTED) The dual-clutch transmission according to claim 57, wherein output sides of said first and second clutches (K1, K2) of said hollow and solid input shafts (3, 4) are non-rotatably interconnectable of a shifting device (38) for performing a starting operation.

59. (PREVIOUS PRESENTED) The dual-clutch transmission according to claim 34, wherein a torsional vibration damper is situated between said first and second clutches (K1, K2) and the drive shaft (2) of the prime mover.

60-66 (CANCELED)